

3. (Amended) A DNA which encodes the polypeptide of claim 1 [or 2].

5. (Amended) A DNA which hybridizes with the DNA of any one of claims [claim] 3, [or] 4 or 46 under stringent conditions and encodes a polypeptide having a nucleoside transporting activity.

6. (Amended) A recombinant DNA which is obtained by inserting the DNA of any one of claims 3, 4 or 46 [to 5] into a vector.

8. (Amended) A transformant which harbours the recombinant DNA of claim 6 [or 7].

12. (Amended) A method for producing [the] a polypeptide [of claim 1 or 2] selected from the group consisting of:

(i) the amino acid sequence described in SEQ ID NO:1 or 5; and

(ii) the amino acid sequence described in SEQ ID NO:1 or 5, wherein one or several amino acids are deleted,

substituted or added and the polypeptide has a nucleoside transporting activity,

which comprises culturing the transformant of [any one of claims 8 to 11] claim 8 in a medium to form and accumulate the polypeptide [of claim 1 or 2] in the culture, and subsequently recovering the polypeptide from the culture.

13. (Amended) An oligonucleotide which is selected from oligonucleotides having a sequence identical to continuous 5 to 60 bases in a nucleotide sequence of the DNA of any one of claims 3, 4 or 46 [to 5], an oligonucleotide having a sequence complementary to said oligonucleotide and oligonucleotide derivatives of these oligonucleotides.

15. (Amended) A method for detecting mRNA encoding [the] a polypeptide [of claim 1 or 2] selected from the group consisting of:

(i) the amino acid sequence described in SEQ ID NO:1 or 5; and

(ii) the amino acid sequence described in SEQ ID NO:1 or 5, wherein one or several amino acids are deleted, substituted or added and the polypeptide has a nucleoside transporting activity,

using the oligonucleotide of claim 13 [or 14].

16. (Amended) A method for inhibiting expression of [the] a polypeptide [of claim 1 or 2] selected from the group consisting of:

(i) the amino acid sequence described in SEQ ID NO:1 or 5; and

(ii) the amino acid sequence described in SEQ ID NO:1 or 5, wherein one or several amino acids are deleted, substituted or added and the polypeptide has a nucleoside transporting activity,

using the oligonucleotide of claim 13 [or 14].

18. (Amended) An immunological detection method of [the] a polypeptide [of claim 1 or 2] selected from the group consisting of:

(i) the amino acid sequence described in SEQ ID NO:1 or 5; and

(ii) the amino acid sequence described in SEQ ID NO:1 or 5, wherein one or several amino acids are deleted, substituted or added and the polypeptide has a nucleoside transporting activity,

or an immunohistological staining method, which comprises using the antibody of claim 17.

20. (Amended) A method for screening a compound capable of changing the activity to transport a nucleoside of the polypeptide [of Claim 1 or 2], which comprises contacting said polypeptide with a test sample.

23. (Amended) The screening method according to claim 22, wherein the detection of changes in the expression of the gene encoding the polypeptide [of claim 1 or 2] is carried out by detecting mRNA encoding said polypeptide using the method of claim 15.

24. (Amended) The screening method according to claim 22, wherein the detection of changes in the expression of the gene encoding the polypeptide [of claim 1 or 2] is carried out by detecting said polypeptide using the method of claim 18.

25. (Amended) A compound obtainable by [any one of the methods of claims 22 to 24] the method of claim 22.

30. (Amended) A preventive agent or a therapeutic agent for ischemic heart disease, cerebral disorder at the time of stroke, immunoreaction accompanied by organ transplantation, malignant tumor, nephritis, pancreatitis or hypertension in a mammal, which comprises the oligonucleotide of claim 13 [or 14].

31. (Amended) An agent for increasing activity of an antiviral agent or a malignant tumor treating agent for a mammal, which comprises the oligonucleotide of claim 13 [or 14].

32. (Amended) An analgesic or an antiplatelet agent for a mammal, which comprises the oligonucleotide of claim 13 [or 14].

33. (Amended) An agent for reducing side effects at the time of chemotherapy of a mammal, which comprises the oligonucleotide of claim 13 [or 14].

38. (Amended) The preventive agent or a therapeutic agent for ischemic heart disease, cerebral disorder at the time of stroke, immune response accompanied

by organ transplantation, malignant tumor, nephritis, pancreatitis or hypertension according to [any one of claims 26, 30 and 34] claim 26, wherein the mammal is human.

39. (Amended) The agent for increasing activity of an antiviral agent or a malignant tumor treating agent according to [any one of claims 27, 31 and 35] claim 27, wherein the mammal is human.

40. (Amended) The analgesic or antiplatelet agent according to [any one of claims 28, 32 and 36] claim 28, wherein the mammal is human.

41. (Amended) The agent for reducing side effects at the time of chemotherapy according to [any one of claims 29, 33 and 37] claim 29, wherein the mammal is human.

45. (Amended) A compound obtainable by the method of claim 43 [or 44].

Kindly add new claims 46-66 as follows:

--46. A DNA which encodes the polypeptide of claim 2.

47. A recombinant DNA which is obtained by inserting the DNA of claim 5 into a vector.

48. A transformant which harbours the recombinant DNA of claim 7.

49. An oligonucleotide which is selected from oligonucleotides having a sequence identical to continuous 5 to 60 bases in a nucleotide sequence of the DNA of claim 5, an oligonucleotide having a sequence complementary to said oligonucleotide and oligonucleotide derivatives of these oligonucleotides.

50. A method for detecting mRNA encoding a polypeptide selected from the group consisting of:

(i) the amino acid sequence described in SEQ ID NO:1 or 5; and

(ii) the amino acid sequence described in SEQ ID NO:1 or 5, wherein one or several amino acids are deleted,

substituted or added and the polypeptide has a nucleoside transporting activity,
using the oligonucleotide of claim 14.

51. A method for inhibiting expression of a polypeptide selected from the group consisting of:

(i) the amino acid sequence described in SEQ ID NO:1 or 5; and

(ii) the amino acid sequence described in SEQ ID NO:1 or 5, wherein one or several amino acids are deleted, substituted or added and the polypeptide has a nucleoside transporting activity,
using the oligonucleotide of claim 14.

52. A compound obtainable by the method of claim 23.

53. A compound obtainable by the method of claim 24.

54. A preventive agent or a therapeutic agent for ischemic heart disease, cerebral disorder at the time of stroke, immunoreaction accompanied by organ transplantation,

malignant tumor, nephritis, pancreatitis or hypertension in a mammal, which comprises the oligonucleotide of claim 14.

55. An agent for increasing activity of an antiviral agent or a malignant tumor treating agent for a mammal, which comprises the oligonucleotide of claim 14.

56. An analgesic or an antiplatelet agent for a mammal, which comprises the oligonucleotide of claim 14.

57. An agent for reducing side effects at the time of chemotherapy of a mammal, which comprises the oligonucleotide of claim 14.

58. The preventive agent or a therapeutic agent for ischemic heart disease, cerebral disorder at the time of stroke, immune response accompanied by organ transplantation, malignant tumor, nephritis, pancreatitis or hypertension according to claim 30, wherein the mammal is human.

59. The preventive agent or a therapeutic agent for ischemic heart disease, cerebral disorder at the time of stroke, immune response accompanied by organ transplantation,

malignant tumor, nephritis, pancreatitis or hypertension according to claim 34, wherein the mammal is human.

60. The agent for increasing activity of an antiviral agent or a malignant tumor treating agent according to claim 31, wherein the mammal is human.

61. The agent for increasing activity of an antiviral agent or a malignant tumor treating agent according to claim 35, wherein the mammal is human.

62. The analgesic or antiplatelet agent according to claim 32, wherein the mammal is human.

63. The analgesic or antiplatelet agent according to claim 36, wherein the mammal is human.

64. The agent for reducing side effects at the time of chemotherapy according to claim 33, wherein the mammal is human.